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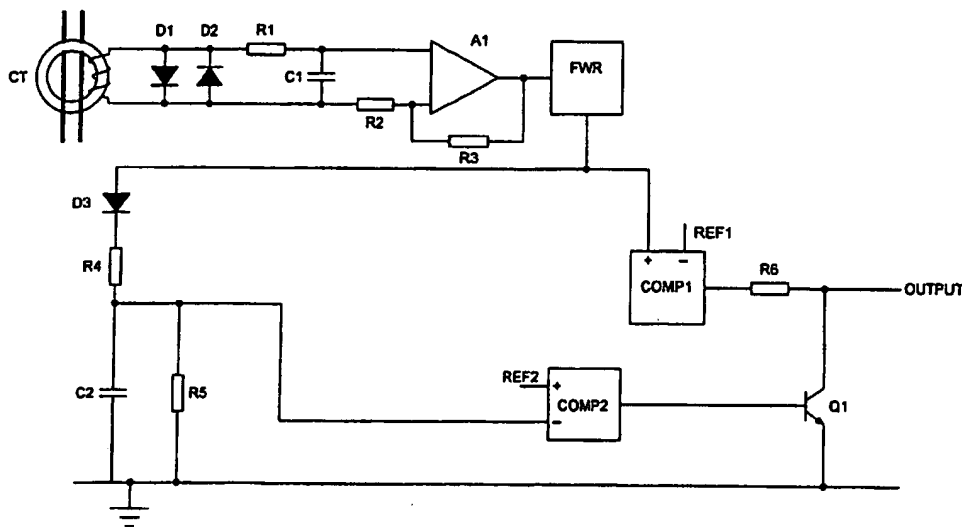
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(54) Title: RESIDUAL CURRENT DETECTION CIRCUIT



(57) Abstract: A residual current detection circuit comprises a current transformer CT for detecting an imbalance current indicative of a residual current and a full wave restifier FWR for providing an output whose amplitude corresponds to the magnitude of the residual current. The FWR output is applied simultaneously to two channels. The first channel includes a first comparator COMP1 to provide a first signal which persists during periods when the amplitude of the output exceeds a first level. The second channel includes a capacitor C2 which acquires a charge corresponding to the output level and a second comparator COMP2 for providing a second signal in response to the capacitor voltage exceeding a second level. An output is provided from the circuit only when the first signal is coincident with the second signal.